WHAT IS CLAIMED IS:

1. A method for directly coating a volatile gelatinous material in a high vacuum comprising:

applying a layer of volatile gelatinous material onto a substrate;

applying a stress absorbing polymeric layer of adhesive material to the surface of the volatile gelatinous material and allow it to cure as a coated substrate; thereafter

imposing a high vacuum upon the coated substrate; and

coating the stress absorbing polymeric layer of the coated substrate with an intended material by physical vapor deposition.

2. The method according to claim 1 wherein said intended materials are dielectric layers formed in pairs of low and high index of refraction materials.

3. A method for directly applying dielectric layers to polymer dispersed liquid crystal material in a high vacuum to form an electro-optic modulator comprising:

applying a layer of polymer dispersed liquid crystal onto a substrate having an optically-transparent electrode on its surface;

applying a stress absorbing polymeric layer of adhesive material to the surface of the polymer dispersed liquid crystal; and

coating the stress absorbing polymeric layer with a plurality of layers of dielectric material by physical vapor deposition to form a mirror.

4. The method according to claim 3 wherein said plurality of dielectric layers have a reflectivity at a specific wavelength band at which the electro optic modulator operates.